REMARKS

I. Summary of Office Action

Claims 1-24, of which claims 1, 9, and 17 are independent claims, are pending in the present application. In the office action mailed October 27, 2005, the Examiner (i) objected to errors in the drawing; (ii) objected to informalities in claim 22; (iii) rejected claims 1-2, 5-6, 8-10, 13, 15-20, and 22-24 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,895,443 (Aiken); (iv) rejected claims 7, 11-12, and 21 under 35 U.S.C. §103(a) as being unpatentable over Aiken in view of U.S. Patent Application No. US 2003/0069955 (Gieseke); and (v) rejected claims 3-4 and 14 under 35 U.S.C. §103(a) as being unpatentable over Aiken in view of *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

The present Response is intended to be fully responsive to the objections and rejections raised by the Examiner and is believed to place the application in condition for allowance. Further, the Applicants do not concede any of the Examiner's rejections or comments not particularly addressed. Favorable reconsideration and allowance of the application is respectfully requested.

II. Amendments to the Specification and Replacement Sheets

On page 18, line 9, Applicants have amended the element number referring to an exemplary protocol stack from 36 to 37. Accordingly, Figure 2, shown in replacement sheet 1, has been amended to reflect the exemplary protocol stack as being identified by element number 37 instead of element 36 as it was previously referred to. This is responsive to the request to correct errors relating to Figures 1 and 2.

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On page 26, line 3, Applicants have amended the step of "Upon the receipt of the first message, the first network device may establish an upstream communication link using the parameters received in the first message" to reference element number 130 as illustrated in Figure 4. This is responsive to the request to correct errors relating to Figure 4.

On page 40, line 17, Applicants have corrected this step so that it refers to element 460 in Figure 12 instead of element 458. In addition, Figure 12, shown in replacement sheet 2, has been amended to correct the typo in the title of Figure 12. This is responsive to the request to correct errors relating to Figure 12.

Figure 13, shown in replacement sheet 3, has been amended so that the previous element 452 has been correctly labeled element 454. This is responsive to the request to correct errors relating to Figure 13.

The amendments to the specification and figures are intended to be fully responsive to the objections of the drawings raised by the Examiner.

III. Amendments to the Claims

Applicants have amended claim 22 to remove the redundant phrase "each record comprising a physical network address." The amendment to claim 22 is intended to be fully responsive to the objection raised by the Examiner. Additionally, claim 17 has been amended to add the indefinite article "a" before network address.

IV. Response to the 35 U.S.C. § 102 Claim Rejections

The Examiner rejected claims 1-2, 5-6, 8-10, 13, 15-20, and 22-24 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,895,443 (Aiken). In order to anticipate a

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claim, a reference must teach every claim element. (MPEP § 2131). Applicants submit that Aiken does not teach every claim element of claims 1, 9, and 17.

Aiken discloses a method and system for "facilitating communication between two or more network segments." (Aiken, Col. 4 lines 34-36). In the method disclosed by Aiken, an intermediate computer facilitates communication by i) detecting Address Resolution Protocol (ARP) requests; ii) re-broadcasting the ARP request so that it appears to have originated from a source computer; and iii) keeping track of the IP address and MAC address of a destination computer. Aiken's method may be used to forward frames to and from the destination computer so that the source computer and the destination computer can communicate without realizing they are on different networks (Aiken, Col. 7 lines 19-32). Aiken's method, however, does not teach Applicants' presently claimed system and method for resolving network addresses for network devices on distributed network subnets.

Applicants' presently claimed method and system for resolving network addresses for network devices on distributed network subnets, in contrast, includes i) "determining whether a response message to the second first protocol message is received;" and ii) "determining a network subnet associated with the first network device," both elements of which are expressly recited in claim 1. These presently claimed elements are presented in a similar manner in claims 9 and 17. The "response message" may be an "address resolution protocol reply message" as recited in claim 9, and the system may include "a second set of instructions implemented to determine whether an address resolution response is received" as recited in claim 17. Determining the network subnet may be performed by "using a first protocol network address of the first network device" as recited in claim 9, or the system may include "a third set of

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instructions implemented to determine a subnet of the first network device using a network address of the first network device," as recited in claim 17.

Applicants maintain that Aiken does not teach "determining whether a response message to the second first protocol message is received," as claimed. In contrast, Aiken discloses a communication program that handles ARP requests by creating multiple modified versions of an ARP request packet. The multiplied ARP request is then sent to each Network Interface Card (NIC) located on a network that the intermediate computer is connected to. (Aiken, Col. 10, lines 50-59). Therefore, instead of monitoring whether a response message was received, as disclosed and expressly claimed by Applicants, Aiken sends every device on the network the modified ARP request. In addition, Aiken never describes how to handle the case where none of the NICs receive a response message. For these reasons at least, Aiken does not teach or support the step of determining whether a response message was received.

In addition, Applicants maintain that Aiken does not teach the step of "determining a network subnet associated with the first network device." Unlike Applicants' presently claimed invention, Aiken teaches no such determination of a subnet. Rather, in the method of Aiken, the communication program, or any other component within the intermediate computer, does not determine the network subnet. The Examiner is requested to point out, with specificity, exactly where Aiken describes determining a network subnet associated with the first network device, as claimed. Again, it appears that the communication program simply forwards a modified ARP request to each NIC on the network that is in communication with. Because the intermediate computer forwards the modified ARP request to every device that is on the network there isn't any motivation for it to determine a subnet associated with a network device. Aiken, therefore,

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also does not teach determining a network subnet. Therefore, the rejections based on Aiken should be reconsidered and withdrawn.

In view of the above, Applicants submit Aiken does not disclose, teach, or suggest each and every claimed element of claims 1, 9, and 17. Because claims 2, 5-6, and 8 depend from claim 1, claims 10, 13, and 15-16 depend from claim 9, and claims 18-20 and 22-24 depend from claim 17 they include all of the limitations of their respective parent claims. Therefore, claims 2, 5-6, 8, 10, 13, 15-16, 18-20, and 22-24 distinguish Aiken for the same reasons as their respective parent claim.

V. Response to the 35 U.S.C. § 103 Claim Rejections

The Examiner (i) rejected claims 7, 11-12, and 21 under 35 U.S.C. §103(a) as being unpatentable over Aiken in view of U.S. Patent Application No. US 2003/0069955 (Gieseke) and (ii) rejected claims 3-4 and 14 under 35 U.S.C. §103(a) as being unpatentable over Aiken in view of *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations (MPEP § 2143). Applicants submit that Aiken does not teach every claim element of claims 1, 9, and 17.

Aiken in View of Gieseke

For the reasons described above, Applicants submit that Aiken does not teach the steps of i) "determining whether a response message to the second first protocol message is received;" and ii) "determining a network subnet associated with the first network device," both elements of

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which are expressly claimed in claim 1 and are also claimed, in a similar manner, in claims 9 and 17. Because claim 7 depends from claim 1, claims 11-12 depend from claim 9, and claim 21 depends from claim 17 they include all of the limitations of their respective parent claims. Therefore, claims 7, 11-12, and 21 distinguish Aiken for the same reasons as their respective parent claim.

Aiken in View of In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961)

For the reasons described above, Applicants submit that Aiken does not teach the steps of i) "determining whether a response message to the second first protocol message is received;" and ii) "determining a network subnet associated with the first network device," both elements of which are expressly claimed in claim 1 and are also claimed, in a similar manner, in claim 9. Because claims 3-4 depend from claim 1 and claim 14 depends from claim 9 they include all of the limitations of their respective parent claims. Therefore, claims 3-4 and 14 distinguish Aiken for the same reasons as their respective parent claim.

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VI. Conclusion

For the reasons set forth above, Applicants submit that claims 1-24 are in condition for allowance and respectfully request the Examiner to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is invited to call the undersigned representative at 312-913-3332.

Respectfully submitted,

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